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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Jefferson IP Law, LLP 1730 M Street, NW Suite 807 Washington, DC 20036			BROWN, RUEBEN M	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 09/965,808	Applicant(s) POCOCK, MICHAEL	
	Examiner Reuben M. Brown	Art Unit 2623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 September 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17, 19-21, 23-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17, 19-21, 23-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>10/15/07</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 9/14/2007 has been entered.

Response to Arguments

2. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection. It is noted that Salimando operates under the same premise as the claimed subject matter, as in locating a provider. In particular, Salimando discloses that each particular business/provider has an associated geographical area that it services, based on its telephone number, including its exchange, col. 2, lines 36-40; col. 4, lines 8-13. This corresponds directly to the known broadcast range of a radio or TV broadcast provider.

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It is further noted that neither Larsen nor Salimando discuss the details of locating an entry/record in the database. However, searching a database by first creating a subset of records based on first field in the records, and then subsequently narrowing the search by only searching through the first subset of records, based on a second or a third field was a well known algorithm in the art of database management. In particular, Thai provides a teaching of optimizing database searches by creating a subset of records that meet a certain criteria, (e.g., state = CA), and then searching those records to retrieve records with a different criteria, (e.g., last name = JONES), see col. 2, lines 9-67 & col. 8, lines 29-64. Other examples of prior art that use similar indexing algorithm(s) for narrowing a search for records, are listed below.

Applicant argues that Larsen is not applicable the claims in light of the presently amended subject matter, 'wherein the received user relate broadcast identifier is not required to identify by itself the at least one radio or TV provider'. However, examiner points out that Larsen is being applied in view of Salimando, whereas Salimando clearly teaches locating a provider based on the geographical identification. Thus, it is the combination of Larsen & Salimando that meets the claimed subject matter, not simply Larsen alone.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-17, 19-21 & 23-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Larson, (U.S. Pat # 5,539,635), in view of Salimando, (U.S. Pat # 5,561,704) and Thai, (U.S. Pat # 5,666,528).

Considering claim 1, the amended claimed method to identify at least one radio or TV broadcast provider through the combination of geographic identification code and a broadcast identifier, is met by the combination of Larsen & Salimando.

Regarding the claimed step of:

‘digitally storing in a database geographic identification codes associated with at least one area or location in which the radio or TV broadcasts are receivable from the at least one radio or TV broadcast provider, such that the database stores at least one broadcast identifier associated with the at least one radio or TV broadcast provider’, reads on the combination of Larsen & Salimando. In particular, Larsen teaches storing in a database 64, at a radio program

distribution system 8, the broadcast identification of a range of radio programs, and corresponding channels/frequency, Fig. 1; Abstract & col. 3, lines 5-35; col. 4, lines 35-41, which reads on the claimed, 'digitally storing in a database, at least one broadcast identifier associated with at least one radio or TV broadcast provider', (e.g., broadcast table 90 & program table 80).

However, even though Larsen teaches creating a database that includes an entry (e.g., (e.g., broadcast table 90 & program table 80) in the database identifying a broadcast program, by time, date and the broadcast provider of the instant broadcast program, (see, Fig. 2; Fig. 3; col. the reference does not teach storing a geographic identification of the broadcast provider. Nevertheless, Salimando discloses a system wherein when a customer dials a specialty phone number, such as a "1-800" number, (col. 2, lines 1-10; col. 3, lines 5-27) the system receives the location of the customer and connects the customer with the provider that is closest to the location of the instant customer. Salimando operates by creating a database of providers, along with the provider's telephone number and location identification, which reads on the claimed subject matter, (col. 2, lines 56-60; col. 3, lines 28-45; col. 4, lines 1-12; col. 4, lines 39-44). It would have been obvious for one of ordinary skill in the art at the time the invention was made, to modify Larsen with the feature of creating a database of providers, based on their geographical location, at least for the improvement of allowing customers to dial a single "1-800" number, and give to them access providers that are local to the customer, as taught by Salimando, Abstract; col. 1, lines 5-61.

‘receiving user related information, such that the user related information comprises geographic identification and a user related broadcast identifier, wherein the user related broadcast identifier is not required to identify by itself the at least one radio or TV broadcast provider’, reads on the combination of Larsen & Salimando. Larsen uses the broadcast identification, time & date (Abstract; col. 2, lines 52-67 & col. 6, lines 8-28) to identify a broadcast program, whereas in Salimando, the customer’s location is electronically transmitted to the Directory Station 11, which then determines the provider that is within the geographical range of the location of the instant customer, see col. 1, lines 51-67; col. 2, lines 25-67; col. 3, lines 15-27.

‘communicating the user related geographic identification code information into the database to create a subset of data, comprising at least one of the stored broadcast identifiers that are associated with the user related geographic identification code, and identifying at least one radio or TV broadcast provider using at least both the subset of data and the user related broadcast identifier’, Salimando teaches that providers are categorized at least based on their location identification, once the Directory Station 11 receives the location of the customer, the closest providers in the geographical area is determined. However, the combination of Larsen & Salimando does not discuss the specifics of, ‘creating a subset of data’. Nevertheless, Thai provides a generic teaching on searching for entry(s) within a database.

In particular, Thai teaches that in order to more efficiently search a database of records, each record of which comprises a plurality of fields, it is desirable to filter the records based on a

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first field, thereby creating a first subset of records and then subsequently filter the first subset of records, using a second field, col. 2, lines 9-67; col. 3, lines 65-67 thru col. 4, lines 1-9; col. 5, lines 25-67; col. 7, lines 5-61 & col. 8, lines 39-62. It is noted that this algorithm is compatible with Larsen & Salimando, since both of the references create a database of records, wherein each record includes a plurality of fields. It would have been obvious for one of ordinary skill in the art to operate Larsen & Salimando in a manner, wherein the database is searched, by creating a first subset of records based on a first criteria, and then further filtering the subset, based on a second criteria, for the desirable improvement of a more optimal search strategy, as taught by Thai. Furthermore, the combination of Larsen & Salimando teaches one of ordinary skill in the art, to provide at least one broadcast program provider to a customer, based on their location and the identifier of the broadcast provider.

Considering claims 2-3, the Larsen teaches using touchtone technology to input the data needed by the system to process the user's request, col. 5, lines 1-30. Official Notice is taken that at the time the invention was made, it was well known in the art of radio and/or TV broadcast services to label broadcast providers with call letters, which are a four letter identifier used to identify particular radio and/or TV broadcast stations. Since the customer in Larsen uses a telephone keypad (which include alphanumeric keys) to input information that identifies a broadcaster, it would have been obvious for one of ordinary skill in the art to operate Larsen in a manner wherein the broadcaster information input by the customer is the call letters of the station, at least for the benefit of allowing the customer to utilize information that is readily accessible to the customer that identifies the instant broadcast provider.

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Considering claims 4-6, subset and indexing of broadcaster information reads on the combination of Larsen, col. 5, lines 40-67 & Salimando, see Fig. 1; col. 2, lines 55-67 and Thai (col. 2 & col. 3) which teaches that the database may be organized according to (i.e., indexed) according to a category. As for claim 5, Thai specifically teaches the use of indexing, col. 2; col. 3; col. 7, lines 51-67; Fig. 1C. As for claim 6, the claimed program schedule information reads on Larsen, since the system allows programs to be accessed according to broadcaster, time and date, see col. 5, lines 22-35.

Considering claims 7-12, 15 & 23-27, the combination of Larsen & Salimando teaches indexing broadcasters, according to geographical information, which requires the transmission/reception of program description, col. 2, lines 35-67; col. 3, lines 31-47. Furthermore, as discussed above in the rejection of claim 3, using the call letters, as a broadcast identifier was well known in the art at the time the invention was made, and would have been obvious modification of Larsen to accept the call letters of a radio and/or TV station as the identification information.

Considering claims 13 & 17, the geographic identification of the providers in Salimando corresponds with the telephone number, col. 2, lines 35-67; Fig. 1 and the coverage of the provider is accordingly determined by its telephone number.

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Considering claim 14, Larsen teaches that the invention is operable in a CATV environment, which would then provide the converter address as geographic information, col. 2, lines 65-67 thru col. 3, lines 1-5. Official Notice is taken that at the time the invention was made, it was known in the art to provide programming to customers' based on the STB ID or address. It would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the combination of Larsen & Salimando, by using the STB address to limit the list of potential providers, at least for the desirable advancement of utilizing a networking system other than the PSTN disclosed in Larsen & Salimando.

Considering claim 16, the location information provided in Salimando determines the area or region, col. 1, lines 51-67.

Considering claim 19, the instant claim corresponds with subject matter mentioned above in the rejection of claim 1, and are likewise treated. Except that the instant claim recites "receiving a network address associated with the user inquiry". Even though Salimando teaches that the database records of the providers include a field for the telephone number of the instant provider, and that the business has an exchange telephone area, which is the surrounding geographical area that the provider supports, col. 2, lines 35-55, the reference does not explicitly discuss that the user inquiry may include network address of the user, only discussing the geographical location of the user instead. Nevertheless, Official Notice is taken that at the time the invention was made, it was well old in the art to provide a caller's telephone number to a central management office, (for instance, using ANI technology) when determining an

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appropriate business/provider, for the caller. Thus, it would have been obvious for one ordinary skill in the art at the time the invention was made, to modify the combination of Larsen & Salimando to utilize the telephone number of a caller in order to determine an appropriate business/provider, in a business/provider look-up system such as Salimando, since it was known in the art that the land line phone number of a caller provides a geographical boundary of the location of the instant caller, based on the area code and/or exchange.

‘querying a database of stored network addresses...that each represent at least one provider’, reads on the disclosure of Salimando of storing the telephone number as a field in the record of each business/provider, col. 2, lines 62-67; col. 1, lines 52-67; col. 3, lines 27-45; Fig. 2.

‘determining whether the received network address matches one of the stored network address’; and ‘if at least one of the stored network address matches the received network address, retrieving the indexed group of broadcast identifiers corresponding to the received network address’ reads on the combination of Salimando & Thai.

‘identifying at least one broadcast provider using both the retrieved indexed group of broadcast identifiers and the received user related broadcast identifier’, again reads on the combination of Larsen (which teaches storing and accessing broadcast providers using their broadcast identification), Salimando (which teaches accessing businesses/providers based on the geographic location of a caller & of the instant business/provider) and Thai (which teaches

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indexing various categories from records in a database, in order to more optimally search the database).

Considering claim 20, the claimed elements of a computer-implemented information system to identify a radio or TV broadcast, comprising features that correspond with subject matter mentioned above in the rejection of claim 1, are likewise treated. The additionally claimed processor reads on the combination of the Request Processing Unit 10 of Larsen, (Fig. 1) and the information processor in Salimando, col. 2, lines 47-67.

Considering claim 21, the claimed feature of inputting the geographic ID code and the broadcast ID code separately, is broad enough to read on the user inputting the requested broadcast station as discussed in Larsen and separately transmitted the location information as discussed in Salimando

Considering claims 28-29, Larsen teaches that the invention is applicable to TV stations, cable systems and satellite broadcasters, which meet the claimed subject matter, col. 2, lines 65-67 thru col. 3, lines 1-4.

Considering claim 30, the claimed method to identify at least one content provider through the combination of a geographic identification code and a content provider identifier, corresponds with subject matter mentioned above in the rejection of claim 1, and is likewise treated.

Considering claim 31, the subject matter reads on Larsen, col. 2, lines 59-67; col. 5, lines 60-67.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- A) Ferguson Teaches searching through a database using a Q-tree structure.
- B) Yanagihara Teaches searching a database by re-defining a search.

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Any response to this action should be mailed to:

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or faxed to:

(571) 273-8300, (for formal communications intended for entry)

Or:


(571) 273-7290 (for informal or draft communications, please label
"PROPOSED" or "DRAFT")

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Reuben M. Brown M. Brown whose telephone number is (571) 272-7290. The examiner can normally be reached on M-F(8:30-6:00), First Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Kelley can be reached on (571) 272-7331. The fax phone numbers for the organization where this application or proceeding is assigned is (571) 273-8300 for regular communications and After Final communications.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Reuben M. Brown


REUBEN M. BROWN
PATENT EXAMINER